A case of sepsis in a 17th century man from Porto Ercole

Reply to Drancourt et alii

A case of sepsis in a 17th century male individual from Porto Ercole (Naples), Italy.

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We read with interest the letter by Drancourt et al. (1) concerning the identification of a case of *Staphilococcus aureus* sepsis in the skeletal remains of an early 17th century male exhumed at Porto Ercole (Tuscany). These remains have been confidently attributed by the authors (1) to Michelangelo Merisi, also known as Caravaggio. We wish to point out several inconsistencies in Caravaggio's personal identification, place of death and cause of his death.

Caravaggio did not father children. (2). Therefore, no contemporary presumed patri-linear descendants of Caravaggio were available for direct Y chromosome comparison (1,3). Detailed accompanying data such as DNA typing methods, nor biostatistics which may have supported the identification of Caravaggio through the combination of genetic analysis and surname information, including the actual "Merisi"/"Merisio" Y-STR haplotype matching that obtained from skeletal remains, were not provided (1,3).

The presence of high levels of lead in the bones of the 17th century skeleton from Porto Ercole does not support the attribution of the remains to Caravaggio either. From Antiquity to Renaissance, exposure to heavy metals (i.e. lead, mercury, arsenic) through dietary intake and medicinal uses has contributed to absorption of these toxins in bones. Exposure to heavy metals also occurred through yhe use of pewter and other lead-bearing cooking utensils, tableware and pottery; similarly, the use of lead water pipes and ingestion of foods and beverages adulterated with lead-based additives contributed to chronic lead poisoning (4).

Lastly, historical sources indicate that Caravaggio was assaulted and severely disfigured in Naples in late September 1609, ten months before his demise (2,5). After having recovered, he went back to work and, between October 20th 1609 and July 18th 1610, he painted several masterpieces including "David and Goliath" (1610) (1). The hypothesis of a secondary sepsis due to super-infection of healed facial wounds appears, therefore, unfounded. Finally, both the place of death (Porto Ercole) and the authenticity of the death register (1,3) are still a matter of debate among art historians. (2)

We agree with Drancourt et al., however, that the presence of *S. aureus* and the osteomyelitis lesions in the male skeleton exhumed at Porto Ercole may indicate that this man died of a septicaemia. However, more focused historical and biological research is needed before these remains are unequivocally attributed to Caravaggio.

References

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